PRELIMINARY ACCOUNT OF A NEW SPECIES OF OKENIA FROM OSAKA BAY, JAPAN (NUDIBRANCHIA-GONIODORIDIDAE)

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With 1 Text-figure

Six species of the genus *Okenia* (subg. *Okenia* s. s.) have been reported from our seas by BABA (1937–1960). While collecting on the rocky shore of Tannowa, Osaka Bay, on July 30 and August 12 of this year, I found specimens of a pretty nudibranch, 15 in total, which appeared to belong to the genus and subgenus mentioned above, probably forming a new species distinct from the previously recorded ones[1]. Their eggs were also formed in the native habitat of the parent animals. My thanks are due to Dr. Kikutaro BABA of the Osaka Gakugei University who has encouraged me to study these specimens, and generously let me use his collection of reprints for identification.

Okenia (*Okenia*) *babai* HAMATANI n. sp.

Kohana-ibara-umiushi (n. n.)

(Fig. 1, A–D)

The living animals are limaciform, 3 to 5 mm in length, and 1 to 2 mm in breadth. The mantle-margin is membraneous, marked off from the sides, and provided with a series of 9 to 11 papillae on each side. Most of them are simple, claviform and pointed. The first papilla on each side is bifid. The last one on each side is also bifid, the main stem of the divisions being rather large and swollen towards the end. On the back there are short pointed papillae about 10 to 14 in number; of these, 3 to 4 are apt to be arranged along the median line from the interspace of two rhinophores to the very back of the gills. The general integument and the various papillae are finely spiculated. The sides of the body are smooth. The foot is narrower than the body, and rounded at the antero-lateral corners; it ends in a short pointed tail behind. The rhinophores

1) For the synopsis of the species of the genus *Okenia* from the world, see MARCUS, 1957, pp. 436–438.

are large, cylindrical, and perfoliated with 4 to 6 pinnae on the upper half. They are non-retractile. The branchiae consist of 7, simply pinnate, non-retractile plumes which are arranged in a semicircle round the anus. The oral tentacles are broad and lobiform. The genital opening is found usually between the fourth and fifth pallial papillae on the right side.

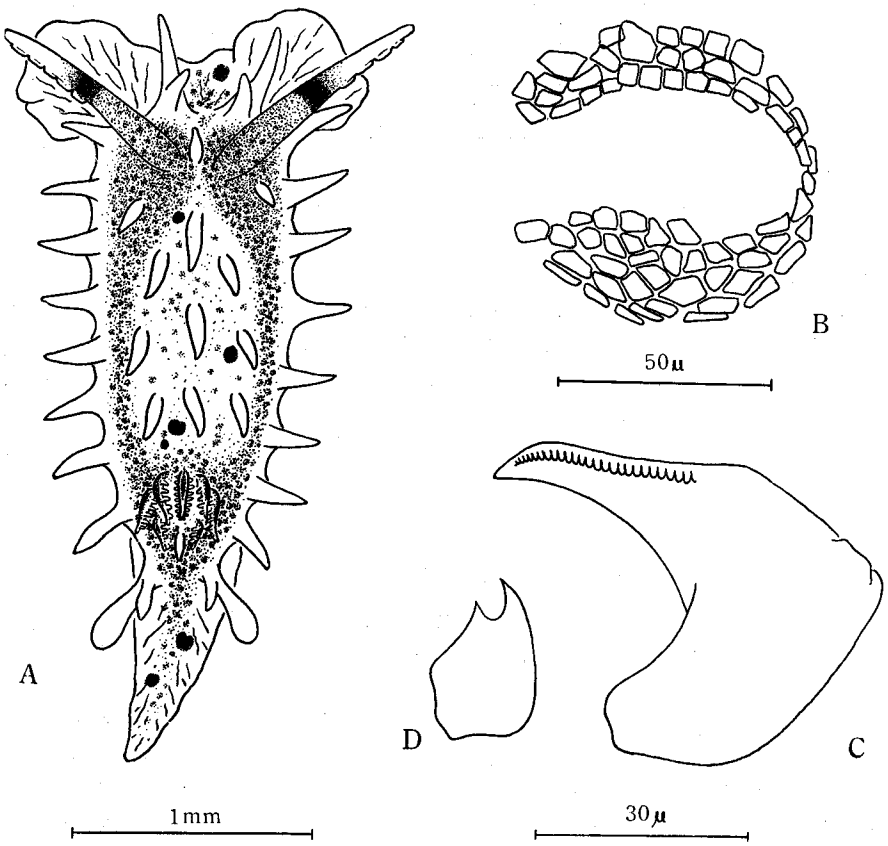

Fig. 1. *Okenia (Okenia) babai.*

A. Living animal (Tannowa, Osaka Bay; July 30, 1961).
B. Ring-shaped labial armature.
C. Inner lateral tooth of radula.
D. Outer lateral tooth of radula.

The ground-colour of the body is slightly yellowish white. Along the mantle-margin on each side of the back there is a greenish band, varying in intensity from dark green to black in different individuals. The two bands thus formed widen in front to cover the base of the rhinophores; posteriorly they unite round the gills and run down on the tail. Patches of green and orange-red may

be distributed irregularly over the back, sides, tail, and raches of the gills. The rhinophores are greenish below, colourless above, and provided with an orange-red band in the middle of their length. The various papillae are colourless save the last pallial papillae which may sometimes be tinged with yellow.

The labial armature is an incomplete ring formed of tiny scales without hooks. The radula formulae are 26–34×1.1.0.1.1. The inner lateral tooth is large, hamate, and armed with a row of denticles on the inner edge of the cusp. The outer lateral tooth is smaller, scale-like, and bifid at the tip.

For its papillated aspect of the back this species reminds me of *Okenia (Okenia) echinata* BABA, 1949 and *O. (O.) opuntia* BABA, 1960, but it differs distinctly from them in the colouration of the body. Moreover, some further differences may also be seen in the number of the dorsal papillae, and in the configuration of the labial armature or of the outer lateral tooth. The species is dedicated to Dr. BABA.

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